CARL T. JONES
CORPORATION

COMPILATION OF DETAILED DPU AND TUNER PERFORMANCE TEST DATA SHEETS

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TABLE OF CONTENTS

SECTION 1.0

DIRECT PICKUP INTERFERENCE TESTING

DATA SHEET
EUT #_____

DATE:_____ **ENGINEER:**_____

EUT MONITOR POINT: _____**BASE-BAND,** _____**IF**

TEST CHANNEL:_____

RADIATED SUSCEPTIBILITY

1. Configure the test configuration as shown in **Figure #4 and #7.** Ensure Generators are adjusted for 0 dBmV (TV video) and -55 dBmV (interference signal [IS]) at the EUT antenna input port.

   INITIAL SETTINGS:

   A. Generator #1 (TV) setting: _____ dBmV
   B. Generator #1 Frequency : _____ MHz
   C. Generator #2 (IS) setting: _____ dBmV
   D. Generator #2 Frequency : _____ MHz

2. Attach the IS monitor cable for the IF monitor or base-band monitor to the EUT. Allow 15 minutes for test system warm-up.

3. Adjust the Spectrum Analyzer to appropriate frequency band (for IF or base-band monitoring).

   ANALYZER SETTINGS:

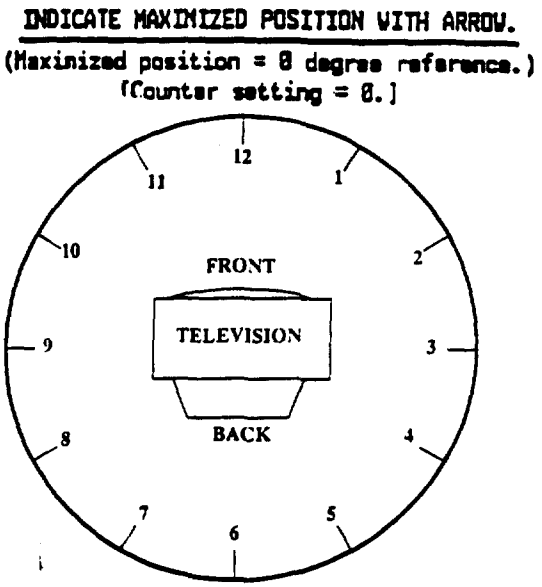
   A. Resolution Bandwidth: _____ kHz
   B. Video Filtering : _____ Hz
   C. Reference Amplitude : _____ dBmV
   D. Start Frequency : _____ MHz
   E. Stop Frequency : _____ MHz

4. With the calibrated interference signal plus TV signal being conducted into the EUT, the indicated signal level of the interference reference signal is: _____ dBmV.

5. Configure the test system as shown in **Figures #2, and #5.** Adjust the interference generator, Generator #2, to the calibrated 3 V/m power setting.

   A. Generator #2 setting: _____ dBmV

6. While monitoring the interference signal on the analyzer, rotate the EUT to maximize the monitored interference reference signals amplitude.



A. Indicated Interference Signal maximum level:_____ dBmV

NOTE: If the maximum indicated level is less than indicated in Step #4, above, test completed. Go to Step #8.

7. Reduce Interference signal generator, Generator #2, until the monitored interference signal matches the amplitude found in Step #4, above.

A. Generator #2 setting: _____ dBmV

8. Repeat Steps #5, #6, and #7, from above, with the EUT rotated to complete ±180 from the EUT's interference signal's maximized orientation, in 45 degree increments.

A. Plus 45°

1. Step #5, Generator #2 setting: _____ dBmV
2. Step #6, Indicated IS level : _____ dBmV
3. Step #7, Generator #2 setting: _____ dBmV

NOTE: If the maximum indicated level is less than indicated in Step #4, above, test completed.
The indicated IS: _____ dBmV

B. Plus 90°

1. Step #5, Generator #2 setting: _____ dBmV
2. Step #6, Indicated IS level : _____ dBmV
3. Step #7, Generator #2 setting: _____ dBmV

NOTE: If the maximum indicated level is less than indicated in Step #4, above, test completed.
The indicated IS: _____ dBμV

C. Plus 135°

1. Step #5, Generator #2 setting: _____ dBmV
2. Step #6, Indicated IS level : _____ dBmV
3. Step #7, Generator #2 setting: _____ dBmV

NOTE: If the maximum indicated level is less than indicated in Step #4, above, test completed.
The indicated IS: _____ dBmV

D. Plus 180°

1. Step #5, Generator #2 setting: _____ dBmV
2. Step #6, Indicated IS level : _____ dBmV
3. Step #7, Generator #2 setting: _____ dBmV

NOTE: If the maximum indicated level is less than indicated in Step #4, above, test completed.
The indicated IS: _____ dBmV

E. Minus 45°

1. Step #5, Generator #2 setting: _____ dBmV
2. Step #6, Indicated IS level : _____ dBmV
3. Step #7, Generator #2 setting: _____ dBmV

NOTE: If the maximum indicated level is less than indicated in Step #4, above, test completed.
The indicated IS: _____ dBmV

F. Minus 90°

1. Step #5, Generator #2 setting: _____ dBmV
2. Step #6, Indicated IS level : _____ dBmV
3. Step #7, Generator #2 setting: _____ dBmV

NOTE: If the maximum indicated level is less than indicated in Step #4, above, test completed.
The indicated IS: _____ dBmV

G. Minus 135°

1. Step #5, Generator #2 setting: _____ dBmV
2. Step #6, Indicated IS level : _____ dBmV
3. Step #7, Generator #2 setting: _____ dBmV

NOTE: If the maximum indicated level is less than indicated in Step #4, above, test completed.
The indicated IS: _____ dBmV

RADIATED DATA SUMMARY SHEET

1. **Reference** Interference Signal Generator setting:_____ dBmV
   [Generator #2, Paragraph 1(C)]

2. Zero degree Interferenec Generator setting: _____ dBmV
   [Generator #2, Paragraph 7(A)]
   1(C) - 7(A) = _____ dB

3. +45 degrees Interference Generator setting: _____ dBmV
   [Generator #2, Paragraph 8(A)(3)]
   1(C) - 8(A)(3) = _____ dB

4. +90 degrees Interference Generator setting: _____ dBmV
   [Generator #2, Paragraph 8(B)(3)]
   1(C) - 8(B)(3) = _____ dB

5. +135 degrees Interference Generator setting: _____ dBmV
   [Generator #2, Paragraph 8(C)(3)]
   1(C) - 8(C)(3) = _____ dB

6. +180 degrees Interference Generator setting: _____ dBmV
   [Generator #2, Paragraph 8(D)(3)]
   1(C) - 8(D)(3) = _____ dB

7. -45 degrees Interference Generator setting: _____ dBmV
   [Generator #2, Paragraph 8(E)(3)]
   1(C) - 8(E)(3) = _____ dB

8. -90 degrees Interference Generator setting: _____ dBmV
   [Generator #2, Paragraph 8(F)(3)]
   1(C) - 8(F)(3) = _____ dB

9. -135 degrees Interference Generator setting: _____ dBmV
   [Generator #2, Paragraph 8(G)(3)]
   1(C) - 8(G)(3) = _____ dB

DATA SHEET
EUT #_____

DATE:_____ ENGINEER:_____

EUT MONITOR POINT: _____BASE-BAND, _____IF

TEST CHANNEL: _____

INJECTION PROBE SUSCEPTIBILITY

1. Configure test configuration as shown in **Figure #6 and #9.** Ensure that the TV signal generator, Generator #1, is adjusted for 0 dBmV (TV video) into the EUT antenna port.

   Adjust the interference signal (IS) generator, Generator #2, to the level required to simulate a 3 V/m impinged signal onto the cable under test, via the cable clamps.

   INITIAL SETTINGS EUT ANTENNA INPUT CABLE:

   A. Generator #1 (TV) setting: _____ dBmV
   B. Generator #1 Frequency : _____ MHz
   C. Generator #2 (IS) setting: _____ dBmV
   D. Generator #2 Frequency : _____ MHz

2. Attach the monitor cable (IF monitor or base-band monitor) to the EUT. Allow 15 minutes for test system warm-up.

3. Adjust Spectrum Analyzer to appropriate frequency band for IF or baseband monitoring.

   ANALYZER SETTINGS:

   A. Resolution Bandwidth: _____ kHz
   B. Video filtering : _____ Hz
   C. Reference Amplitude : _____ dBmV
   D. Start Frequency : _____ MHz
   E. Stop Frequency : _____ MHz

4. With the calibrated, **maximized**, 3 V/m impinged interference signal being injected onto the EUT ANTENNA cable, the indicated signal level at the monitor point (IF or baseband), of the interference reference signal is: _____ dBmV.

5. Reduce the Interference signal generator level, Generator #2, until the monitored interference signal matches the amplitude found in Radiated Susceptibility Step #4.

Note: If the indicated monitored IS level is less than was recorded in Step #4, the test is completed.

A. Indicted Interference Reference level:_____ dBmV
B. Generator #2 setting: _____ dBmV

6. Configure test configuration as shown in **Figure #6 and #9.** Ensure that the TV signal generator, Generator #1, is adjusted for 0 dBmV (TV video) into the EUT antenna port.

Adjust the interference signal (IS) generator, Generator #2, to the level required to simulate a 3 V/m impinged signal onto the EUT POWER cable, via the cable clamps.

INITIAL SETTINGS EUT POWER CABLE:

A. Generator #1 (TV) setting: _____ dBmV
B. Generator #1 Frequency : _____ MHz
C. Generator #2 (IS) setting: _____ dBmV
D. Generator #2 Frequency : _____ MHz

7. Attach the monitor cable (IF monitor or base-band monitor) to the EUT. Allow 15 minutes for test system warm-up.

8. Adjust Spectrum Analyzer to appropriate frequency band for IF or baseband monitoring.

ANALYZER SETTINGS:

A. Resolution Bandwidth: _____ kHz
B. Video filtering : _____ Hz
C. Reference Amplitude : _____ dBmV
D. Start Frequency : _____ MHz
E. Stop Frequency : _____ MHz

9. With the calibrated, **maximized**, 3 V/m impinged interference signal being injected onto the POWER cable, the indicated signal level at the monitor point (IF or baseband), of the interference reference signal is: _____ dBmV.

10. Reduce the Interference signal generator level, Generator #2, until the monitored interference signal matches the amplitude found in Radiated Susceptibility Step #4.

Note: If the indicated monitored IS level is less than was recorded in Step #4, the test is completed.

A. Indicted Interference Reference level:_____ dBmV
B. Generator #2 setting: _____ dBmV

INJECTED SUSCEPTIBILITY DATA SUMMARY SHEET

1. **Reference** Interference Signal Generator setting:_____ dBmV
   [Generator #2, Paragraph 1(C)]

2. **Reference** Interference Signal Generator setting:_____ dBmV
   [Generator #2, Paragraph 6(C)]

3. **VIDEO CABLE** Interferenec Generator setting: _____ dBmV
   [Generator #2, Paragraph 5(B)]
   1(C) - 5(B) = _____ dB

4. **POWER CABLE** Interference Generator setting: _____ dBmV
   [Generator #2, Paragraph 6(B)]
   6(C) - 10(B) = _____ dB

TV CONFIGURATION

COMMENTS: _____

SECTION 2.0

TUNER PERFORMANCE TESTING

OPEN FIELD RANGE EMISSIONS TEST DATA SHEET

EUT #

EUT ON PORT A SELECTED

CHANNEL	SELECTED EMISSION LEVEL (dBuV)	ANTENNA FACTOR AND CABLE LOSS (dB)	EMISSIONS LEVEL (uV/m)
15		13.5	
25		20.2	
37		23.0	
53		27.0	

EUT ON PORT B SELECTED

CHANNEL	SELECTED EMISSION LEVEL (dBuV)	ANTENNA FACTOR AND CABLE LOSS (dB)	EMISSIONS LEVEL (uV/m)
15		13.5	
25		20.2	
37		23.0	
53		27.0	

EUT OFF

CHANNEL	SELECTED EMISSION LEVEL (dBuV)	ANTENNA FACTOR AND CABLE LOSS (dB)	EMISSIONS LEVEL (uV/m)
15		13.5	
25		20.2	
37		23.0	
53		27.0	

COMMENTS: CABLE ALWAYS IN PORT A

DATE

ENGINEER

LOCAL OSCILLATOR LEAKAGE
AND BACKFEED
DATA SHEET

EUT #: _____ Date: _____ EUT Type: _____

(Note: Spectrum Analyzer settings: RES Bw = 300 kHz, VBw = 30 kHz.)

1. Verify test configuration as shown in **Figure A** _____.
2. Verify **CW Generator is OFF** _____.
3. Set **BB Generator for 10 IRE** _____.
4. Set **Modulator for Channel #3** _____.
5. Adjust **Modulator Attenuator to 18.0 dB** _____.
   (Pre-calibrated to produce +15 dBmV Video Carrier and +5 dBmV Aural Carrier at the EUT input.)
6. While monitoring TP1, scan the EUT from 5 MHz to 600 MHz. Record frequencies and amplitudes of any emissions indicated greater than -22.0 dBmV ... which is greater than -35 dBmV at the EUT antenna input port, from 5 MHz to 600 MHz. Test Channel Video and Aural carriers will be excluded.
   (If many emissions are detected, make a spectral plot).

Frequency (MHz)	Indicated Level (dBmV)
107.00	

7. Set **Baseband Generator and Modulator for Channel #12, 10 IRE** _____.
8. Adjust **Modulator Attenuator to 18.0 dB** _____.
   (Pre-calibrated to produce +15 dBmV Video Carrier and +5 dBmV Aural Carrier at the EUT input.)
9. Select Spectrum Analyzer to monitor **TP1** (50Ω Input) _____.
10. While monitoring TP1, scan the EUT from 5 MHz to 600 MHz. Record frequencies and amplitudes of any emissions indicated greater than -22.0 dBmV ... which is greater than -35 dBmV at the EUT antenna input port, from 5 MHz to 600 MHz. Test Channel Video and Aural carriers will be excluded.
    (If many emissions are detected, make a spectral plot).

Frequency (MHz)	Indicated Level (dBmV)
251.00	

11. Set **Baseband Generator and Modulator for Channel #53, 10 IRE** _____.
12. Adjust **Modulator Attenuator to 13.0 dB** _____.
    (Pre-calibrated to produce +15 dBmV Video Carrier and +5 dBmV Aural Carrier at the EUT input.)
13. Select Spectrum Analyzer to monitor **TP1** (50Ω Input) _____.

14. While monitoring TP1, scan the EUT from 5 MHz to 600 MHz. Record frequencies and amplitudes of any emissions indicated greater than -22.0 dBmV ... which is greater than -35 dBmV at the EUT antenna input port, from 5 MHz to 600 MHz. Test Channel Video and Aural carriers will be excluded.
(If many emissions are detected, make a spectral plot).

Frequency (MHz)	Indicated Level (dBmV)
443.00	

15. Set **Baseband Generator and Modulator for Channel #74** _____.
16. Adjust **Modulator Attenuator to 14.0 dB** _____.
(Pre-calibrated to produce +15 dBmV Video Carrier and +5 dBmV Aural Carrier at the EUT input.)
17. Select Spectrum Analyzer to monitor **TP1** (50Ω Input) _____.
18. While monitoring TP1, scan the EUT from 5 MHz to 600 MHz. Record frequencies and amplitudes of any emissions indicated greater than -22.0 dBmV ... which is greater than -35 dBmV at the EUT antenna input port, from 5 MHz to 600 MHz. Test Channel Video and Aural carriers will be excluded.
(If many emissions are detected, make a spectral plot).

Frequency (MHz)	Indicated Level (dBmV)
569.00	

19. Set **Baseband Generator and Modulator for Channel #3, 10 IRE** _____.
20. Adjust **Modulator Attenuator to 33.0 dB** _____.
(Pre-calibrated to produce 0 dBmV Video Carrier and -10 dBmV Aural Carrier at the EUT input.)
21. Select Spectrum Analyzer to monitor **TP1** (50Ω Input) _____.
22. While monitoring TP1, scan the EUT from 5 MHz to 600 MHz. Record frequencies and amplitudes of any emissions indicated greater than -22.0 dBmV ... which is greater than -35 dBmV at the EUT antenna input port, from 5 MHz to 600 MHz. Test Channel Video and Aural carriers will be excluded.
(If many emissions are detected, make a spectral plot).

Frequency (MHz)	Indicated Level (dBmV)
107.00	

23. Set **Baseband Generator and Modulator for Channel #12, 10 IRE** _____.
24. Adjust **Modulator Attenuator to 33.0 dB** _____.
(Pre-calibrated to produce 0 dBmV Video Carrier and -10 dBmV

Aural Carrier at the EUT input.)

25. Select Spectrum Analyzer to monitor **TP1** (50Ω Input) _____.
26. While monitoring TP1, scan the EUT from 5 MHz to 600 MHz. Record frequencies and amplitudes of any emissions indicated greater than -22.0 dBmV ... which is greater than -35 dBmV at the EUT antenna input port, from 5 MHz to 600 MHz. Test Channel Video and Aural carriers will be excluded. (If many emissions are detected, make a spectral plot).

Frequency (MHz)	Indicated Level (dBmV)
251.00	

27. Set **Baseband Generator and Modulator for Channel #53, 10 IRE** _____.
28. Adjust **Modulator Attenuator to 28.0 dB** _____. (Pre-calibrated to produce 0 dBmV Video Carrier and -10 dBmV Aural Carrier at the EUT input.)
29. Select Spectrum Analyzer to monitor **TP1** (50Ω Input) _____.
30. While monitoring TP1, scan the EUT from 5 MHz to 600 MHz. Record frequencies and amplitudes of any emissions indicated greater than -22.0 dBmV ... which is greater than -35 dBmV at the EUT antenna input port, from 5 MHz to 600 MHz. Test Channel Video and Aural carriers will be excluded. (If many emissions are detected, make a spectral plot).

Frequency (MHz)	Indicated Level (dBmV)
443.00	

31. Set **Baseband Generator and Modulator for Channel #74, 10 IRE** _____.
32. Adjust **Modulator Attenuator to 29.0 dB** _____. (Pre-calibrated to produce 0 dBmV Video Carrier and -10 dBmV Aural Carrier at the EUT input.)
33. Select Spectrum Analyzer to monitor **TP1** (50Ω Input) _____.
34. While monitoring TP1, scan the EUT from 5 MHz to 600 MHz. Record frequencies and amplitudes of any emissions indicated greater than -22.0 dBmV ... which is greater than -35 dBmV at the EUT antenna input port, from 5 MHz to 600 MHz. (If many emissions are detected, make a spectral plot).

Frequency (MHz)	Indicated Level (dBmV)
569.00	

CALIBRATION DATA FOR SIGNAL LOSS

[LO LEAKAGE FROM CABLE END (EUT INPUT) THROUGH SYSTEM ATTENUATOR; THROUGH DIRECTIONAL COUPLER (INPUT-TO-TAP OUTPUT); THROUGH AMPLIFIER; TO THE SPECTRUM ANALYZER INPUT (50Ω CONNECTOR).] **SEE FIGURE A.**

FREQUENCY (MHz)	INPUT (dBmV)	READING (dBmV)	GAIN (dB)
10.00	0.0	16.6	16.6
20.00	0.0	15.6	15.6
30.00	0.0	15.5	15.5
40.00	0.0	15.4	15.4
50.00	0.0	15.2	15.2
61.25 C	**0.0**	**15.1**	**15.1**
100.00	0.0	14.3	14.3
107.00 LO	**0.0**	**14.2**	**14.2**
150.00	0.0	14.1	14.1
200.00	0.0	13.8	13.8
205.25 C	**0.0**	**13.7**	**13.7**
250.00	0.0	13.9	13.9
251.00 LO	**0.0**	**13.9**	**13.9**
300.00	0.0	13.9	13.9
350.00	0.0	13.5	13.5
397.25 C	**0.0**	**11.9**	**11.9**
400.00	0.0	11.9	11.9
443.00 LO	**0.0**	**10.2**	**10.2**
500.00	0.0	8.9	8.9
523.25 C	**0.0**	**8.3**	**8.3**
569.00 LO	**0.0**	**7.4**	**7.4**
600.00	0.0	7.3	7.3

LOCAL OSCILLATOR LEAKAGE AND BACKFEED SYSTEM CONFIGURATION

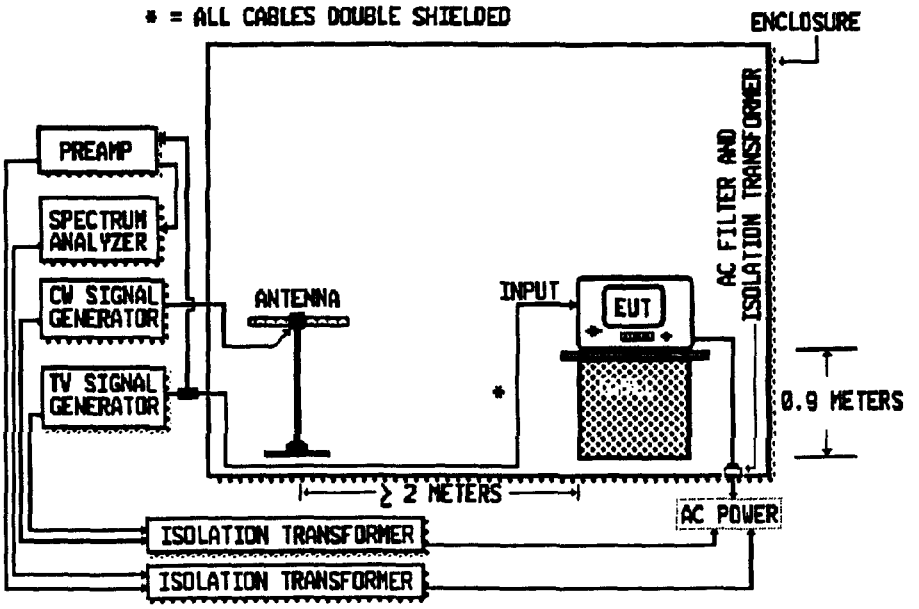


FIGURE A

LOCAL OSCILLATOR LEAKAGE AND BACKFEED TEST CONFIGURATION

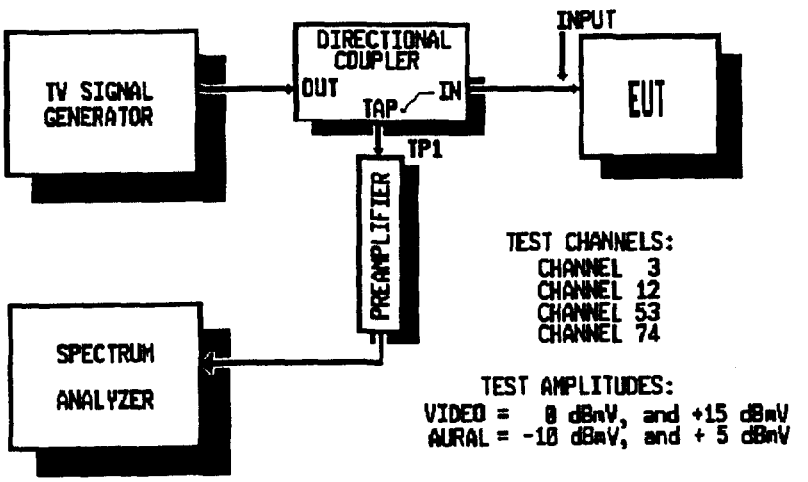


FIGURE 3

A/B SWITCH TEST
NON-SELECTED TO SELECTED INPUT PORT ISOLATION
(EUT's with A & B Inputs)

EUT# _____ DATE: _____ EUT TYPE: _____

CALIBRATION:

Measure the gain from the EUT input connector through the preamplifier to the spectrum analyzer for each test channel. See Figure 6.

GAIN for Channel 3 (61.25 MHz) ... _____ dB
GAIN for Channel 12 (205.25 MHz) ... _____ dB
GAIN for Channel 53 (397.25 MHz) ... _____ dB
GAIN for Channel 74 (523.25 MHz) ... _____ dB

A/B TEST

CHANNEL 3 TEST:

1. Verify that the test system is configured as shown in Figure 6 _____.
2. Turn on EUT to Channel 3 _____.
3. Adjust the CW generator for 61.25 MHz _____.
4. Adjust the CW generator for +30 dBmV (90 dBμV) at the EUT input connector _____.
5. Attach CW generator output to EUT A input connector _____.
6. Select the EUT to operate from the B input connector _____.
7. Measure the CW signal level at the B input connector port.
   B Port level: _____ dBmV
8. minus CH 3 gain = -_____ dB
9. equals **level at EUT** _____ dBmV
10. Isolation equals **30 dBmV - level at EUT** _____ = _____ dB.

CHANNEL 12 TEST:

1. Verify that the test system is configured as shown in Figure 6 _____.
2. Turn on EUT to Channel 12 _____.
3. Adjust the CW generator for 205.25 MHz _____.
4. Adjust the CW generator for +30 dBmV (90 dBμV) at the EUT input connector _____.
5. Attach CW generator output to EUT A input connector _____.
6. Select the EUT to operate from the B input connector _____.
7. Measure the CW signal level at the B input connector port.
   B Port level: _____ dBmV
8. minus CH 12 gain = -_____ dB
9. equals **level at EUT** _____ dBmV
10. Isolation equals **30 dBmV - level at EUT** _____ = _____ dB.

CHANNEL 53 TEST:

1. Verify that the test system is configured as shown in Figure 6 _____.
2. Turn on EUT to Channel 53 _____.
3. Adjust the CW generator for 397.25 MHz _____.
4. Adjust the CW generator for +30 dBmV (90 dBμV) at the EUT input connector _____.
5. Attach CW generator output to EUT A input connector _____.
6. Select the EUT to operate from the B input connector _____.
7. Measure the CW signal level at the B input connector port.
   B Port level: _____ dBmV
8. minus CH 53 gain = -_____ dB
9. equals **level at EUT** _____ dBmV
10. Isolation equals **30 dBmV - level at EUT** _____ = _____ dB.

CHANNEL 74 TEST:

1. Verify that the test system is configured as shown in Figure 6 _____.
2. Turn on EUT to Channel 74 _____.
3. Adjust the CW generator for 523.25 MHz _____.
4. Adjust the CW generator for +30 dBmV (90 dBμV) at the EUT input connector _____.
5. Attach CW generator output to EUT A input connector _____.
6. Select the EUT to operate from the B input connector _____.
7. Measure the CW signal level at the B input connector port.
   B Port level: _____ dBmV
8. minus CH 74 gain = -_____ dB
9. equals **level at EUT** _____ dBmV
10. Isolation equals **30 dBmV - level at EUT** _____ = _____ dB.

B/A TEST

CHANNEL 3 TEST:

1. Verify that the test system is configured as shown in Figure 6 _____.
2. Turn on EUT to Channel 3 _____.
3. Adjust the CW generator for 61.25 MHz _____.
4. Adjust the CW generator for +30 dBmV (90 dBμV) at the EUT input connector _____.
5. Attach CW generator output to EUT B input connector _____.
6. Select the EUT to operate from the A input connector _____.
7. Measure the CW signal level at the A input connector port.
   A Port level: _____ dBmV
8. minus CH 3 gain = -_____ dB
9. equals **level at EUT** _____ dBmV
10. Isolation equals **30 dBmV - level at EUT** _____ = _____ dB.

CHANNEL 12 TEST:

1. Verify that the test system is configured as shown in Figure 6 _____.
2. Turn on EUT to Channel 12 _____.
3. Adjust the CW generator for 205.25 MHz _____.
4. Adjust the CW generator for +30 dBmV (90 dBμV) at the EUT input connector _____.
5. Attach CW generator output to EUT B input connector _____.
6. Select the EUT to operate from the A input connector _____.
7. Measure the CW signal level at the A input connector port.
   A Port level: _____ dBmV
8. minus CH 12 gain = -_____ dB
9. equals **level at EUT** _____ dBmV
10. Isolation equals **30 dBmV - level at EUT** _____ = _____ dB.

CHANNEL 53 TEST:

1. Verify that the test system is configured as shown in Figure 6 _____.
2. Turn on EUT to Channel 53 _____.
3. Adjust the CW generator for 397.25 MHz _____.
4. Adjust the CW generator for +30 dBmV (90 dBμV) at the EUT input connector _____.
5. Attach CW generator output to EUT B input connector _____.
6. Select the EUT to operate from the A input connector _____.
7. Measure the CW signal level at the A input connector port.
   A Port level: _____ dBmV
8. minus CH 53 gain = -_____ dB
9. equals **level at EUT** _____ dBmV
10. Isolation equals **30 dBmV - level at EUT** _____ = _____ dB.

CHANNEL 74 TEST:

1. Verify that the test system is configured as shown in Figure 6 _____.
2. Turn on EUT to Channel 74 _____.
3. Adjust the CW generator for 523.25 MHz _____.
4. Adjust the CW generator for +30 dBmV (90 dBμV) at the EUT input connector _____.
5. Attach CW generator output to EUT B input connector _____.
6. Select the EUT to operate from the A input connector _____.
7. Measure the CW signal level at the A input connector port.
   A Port level: _____ dBmV
8. minus CH 74 gain = -_____ dB
9. equals **level at EUT** _____ dBmV
10. Isolation equals **30 dBmV - level at EUT** _____ = _____ dB

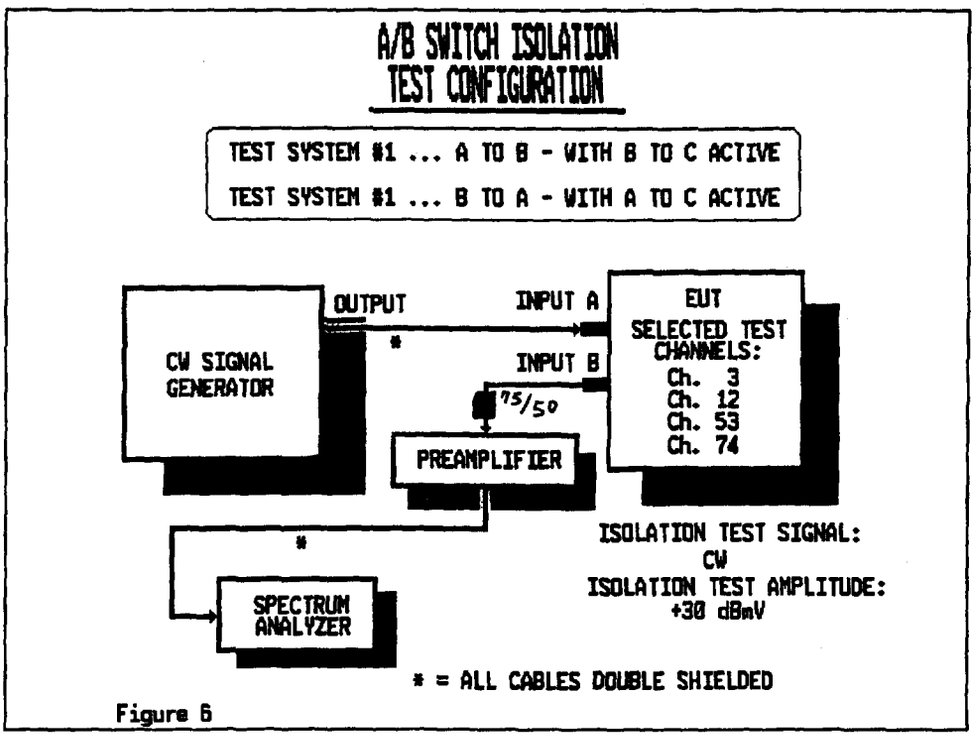


Figure 6

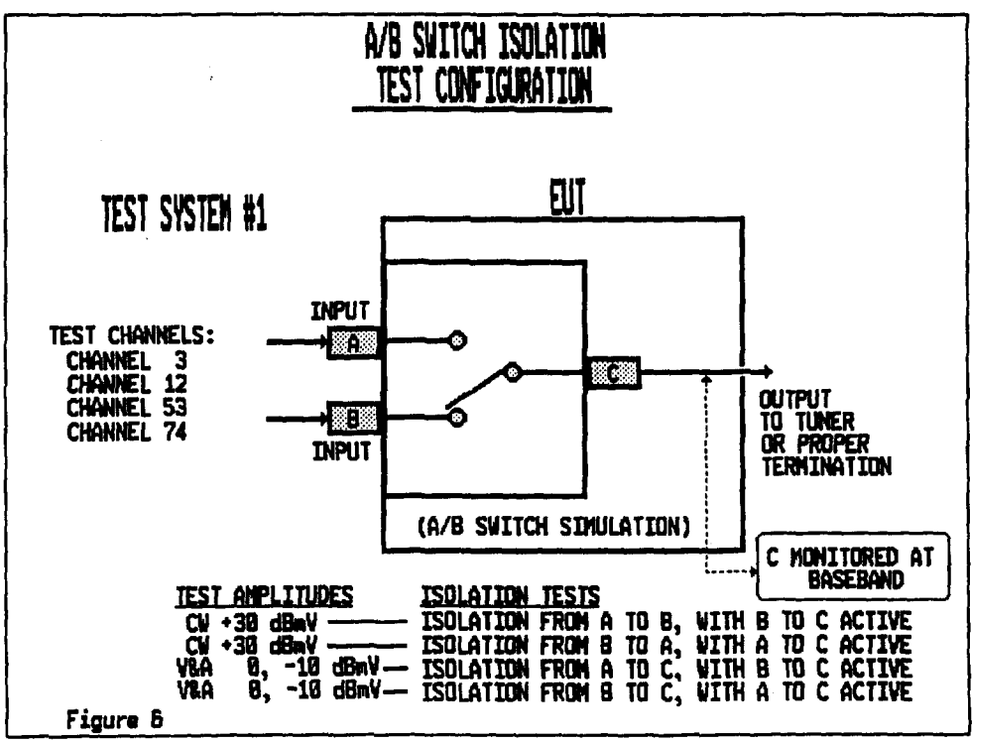
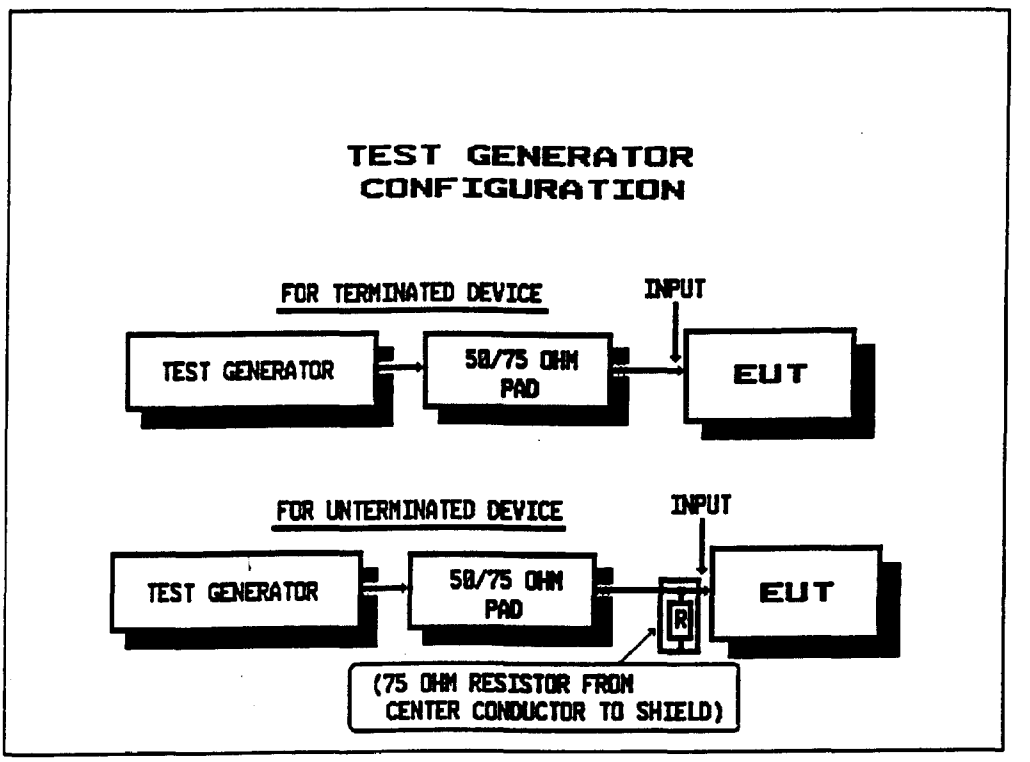


Figure 6

TEST GENERATOR CONFIGURATION
FOR
A/B SWITCH ISOLATION TESTING

Depending on whether the EUT input is terminated, or not, the following test signal source configuration will be used.



A/B SWITCH TEST
NON-SELECTED INPUT TO OUTPUT PORT ISOLATION

EUT #:_____ DATE _____ EUT TYPE:_____

CALIBRATING THE VM 700A:

1. Verify test system as shown in Figure 7, and 7A _____.
2. Measure **CW GENERATOR 1** loss from output to EUT input:

Channel 03 ... 63.80 MHz ... _____ dB
Channel 12 ... 207.80 MHz ... _____ dB
Channel 53 ... 399.80 MHz ... _____ dB
Channel 74 ... 525.80 MHz ... _____ dB

B/C TEST

CHANNEL 3 TEST:

1. Verify that the test system is configured as shown in Figure 7, and 7A _____.
2. Verify **CW GENERATOR 1** is OFF _____.
3. Select **TV SIGNAL GENERATOR** (Baseband Generator and Modulator) for Channel 3 operation _____.
4. Adjust **TV SIGNAL GENERATOR** (Baseband Generator and Modulator) for 0 dBmV Video Carrier and -10 dBmV Aural Carrier at the input connector, Input A, of the EUT _____.
5. Adjust the **CW GENERATOR 2** for 63.80 MHz _____.
6. Adjust the **CW GENERATOR 2** for +30 dBmV (90 dBμV) at the input connector, Input B, of the EUT _____.
7. Select the EUT to operate from the A input connector _____.
8. Adjust the VM 700A to monitor the EUT's baseband Frequency Spectrum, Field 1, Line 16 _____.
9. From the VM 700A, measure the injected isolation frequency reference level:

FREQUENCY (MHz)	**EMISSION LEVEL (dBmV)**
≈1.04 MHz	_____

10. Turn-off CW GENERATOR 2 _____.
11. Turn-on CW GENERATOR 1 to 63.80 MHz _____.
12. Using **CW GENERATOR 1**, adjust output level until isolation frequency reference level (Step 9) is matched.

CW GENERATOR 2 OUTPUT LEVEL (dBμV)
_____

13. CW GENERATOR 1 OUTPUT LEVEL (Step 12) - cable loss _____ = isolation substitute signal level at EUT = _____ dBμV.

14. Isolation = 90 dBμV - level recorded in Step 13 = _____ dB.

15. Turn-off CW GENERATOR 1 _____.